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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/717,729	11/20/2003	Roger L. Stolte	1149.1101101	8697
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CROMPTON, SEAGER & TUFTE, LLC			DOUYON, LORNA M	
1221 NICOLLET AVENUE			ART UNIT	
SUITE 800			PAPER NUMBER	
MINNEAPOLIS, MN 55403-2420			1751	

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/717,729

Applicant(s)

STOLTE ET AL.

Examiner

Lorna M. Douyon

Art Unit

1751

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 May 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

1. This action is responsive to the amendment filed on May 4, 2006.
2. Claims 1-69 are pending.
3. Claims 1, 7, 33, 34, 36, 38, and 44 stand objected to because of the following informalities:

Independent claims 1, 33, 34, 36 and 38 recite the acronym "HEDTA". It is suggested that the first occurrence of the term, i.e., in claim 1 be spelled out followed by the acronym in parentheses.

In claims 7 and 44, line 1 of each claim, it is suggested that "a" after "comprises" be deleted. In addition, in claim 7, last line, "a" before "baits" should also be deleted, or "baits" be rewritten in singular form.

Appropriate correction is required.

4. The rejection of claims 1, 5-9, 11-18, 21, 22, 34, 36, 38, 42-46, 48-55, 58 and 59 under 35 U.S.C. 102(b) as being anticipated by Curry et al. (US Patent No. 4,560,492) is withdrawn in view of Applicants' amendment.
5. The rejection of claim 36 under 35 U.S.C. 102(b) as being anticipated by Griffin, Jr. et al. (US Patent No. 5,472,633) is withdrawn in view of Applicants' amendment.

Art Unit: 1751

6. The rejection of claims 1-69 under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wei et al. (US Patent No. 6,258,765 is withdrawn in view of Applicants' amendment.

7. The rejection of claims 1-11, 13, 15-16, 23, 28-31 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 7, 8, 12-13 of U.S. Patent No. 6,258,765 is withdrawn in view of Applicants' amendment.

8. The rejection of claims 1-11, 13, 15-16, 23, 28-31 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 7, 8, 13-16 of U.S. Patent No. 6,653,266 is withdrawn in view of Applicants' amendment.

9. The rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 75 of U.S. Patent No. 6,660,707 is withdrawn in view of Applicants' amendment.

10. The provisional rejection of claims 1-8, 13, 15-16, 31-32, 34 and 36 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 7-8, 10, 12-13 of copending Application No. 10/714,836 is withdrawn in view of Applicants' amendment.

Art Unit: 1751

11. The provisional rejection of claims 1-11, 15-16, 23, 29-48, 50, 52-53, 60 and 66-69 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 5, 23, 27, 28, 32, 33, 35-37, 39, 47, 48, 52, 74, 75, 80, 81, 82, 83, 86 and 87 of copending Application No. 09/874,841 is withdrawn in view of Applicants' amendment and the abandonment of said application on February 2, 2006.

12. The provisional rejection of claims 1-11, 15-16, 23, 29-48, 50, 52-53, 60 and 66-69 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 41-46 of copending Application No. 10/714,355 is withdrawn in view of Applicants' amendment.

13. The provisional rejection of claim 1 on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 45 of copending Application No. 11/009,315 is withdrawn in view of Applicants' amendment.

14. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

15. Claims 1, 5-9, 11-18, 21, 22, 34, 36, 38, 42-46, 48-55, 58 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Curry et al. (US Patent No. 4,560,492), hereinafter "Curry".

Curry teaches a granular laundry detergent composition (which reads on solid composition), prepared by spray drying (see col. 12, lines 13-15), which is essentially free of inorganic phosphate salts and comprising: (a) from about 10% to about 65% by weight of a detergent surfactant like anionic surfactants, nonionic surfactants and mixtures thereof, from about 3% to about 60% by weight of a detergency builder like water-soluble sodium aluminosilicates and organic detergency builders; (c) from about 0.5% to about 10% by weight hydroxyethylethylenediaminetriacetic acid (HEDTA), or alkali metal salt thereof; (d) from 0% to about 75% by weight of a water-soluble inorganic detergency builder selected from the group consisting of alkali metal silicates, alkali metal carbonates and mixtures thereof (see claim 6; col. 2, lines 26-51). Suitable anionic surfactants include water-soluble alkyl sulfates (having straight alkyl radicals), see col. 3, lines 1-16. Suitable nonionic surfactants include the condensation product of ethylene oxide with a straight aliphatic alcohol having about 8 to about 24 carbon atoms (see col. 3, lines 26-45). The composition can also contain perfumes, colorants and antiredeposition agents (see col. 9, line 56). The composition does not contain components that can compete with the HEDTA for water and interfere with solidification as required in claims 18 and 55. The mixing of the ingredients, which comprises HEDTA and water, would distribute these components throughout the solid cleaning composition and binds the functional ingredient within the solid composition as required in claims 6 and 43, and would reasonably form a solid binding agent. Curry, however, fails to specifically disclose a solid composition comprising HEDTA and water, which is free of carbonate.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare a granular or solid composition comprising HEDTA and water because the

Art Unit: 1751

teachings of Curry encompass these ingredients and to prepare said composition without carbonate because the carbonate is only optional as disclosed in claim 6 and col. 2, lines 48-51, and need not be present in the composition.

16. Claims 19-20 and 56-57 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Curry as applied to the above claims, and further in view of Magari et al. (US Patent No. 4,416,809), hereinafter "Magari".

Curry teaches the features as described above. Curry, however, fails to specifically disclose the amount of water in the spray-dried composition.

Magari teaches a spray dried granular detergent composition wherein the water content after spray drying is present in the range from 2-3 wt% of the composition (see Table 1 under col. 5-6).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to reasonably expect the water content in the spray dried detergent composition of Curry to be in the range from 2-3 wt% because it is known from Magari that a detergent composition which is spray dried usually contains such amount of water.

17. Claims 1-11, 13, 15-28, 30, 32-48, 50, 52-65, 67, 69 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steindorf (US Patent No. 5,340,501).

Steindorf teaches a detergent composition as a solid cast block which includes a sodium based alkaline source as a deterative component which is typically sodium hydroxide or sodium silicate (see col. 3, lines 1-9), potassium salt of an aminocarboxylic acid as a sequestrant, and

Art Unit: 1751

may also include potassium based alkaline source, sodium salt of an aminocarboxylic acid, water for facilitating processing and permitting solidification, a hydrating agent for facilitating solidification, a secondary sequestrant, and/or other typical detergent additives such as dyes, perfumes, bleaching agents, fillers and the like (see col. 2, lines 44-55). The solid cast block detergent compositions are commonly produced from about 2 to about 20 kg in size (see col. 1, lines 20-22). One suitable aminocarboxylic acid chelating agent is N-hydroxyethyl-ethylenediaminetriacetic acid (HEDTA) (see col. 3, lines 38-42). The alkali metal salts of the aminocarboxylate sequestering agent should comprise about 20 to 40 wt% of the detergent composition (see col. 3, lines 55-59). The hydrating agent for facilitating solidification which includes anhydrous sodium carbonate, among others, is only optional (see col. 4, lines 9-29). A secondary sequestering agent includes sodium tripolyphosphate (see col. 5, line 23). The detergent composition should comprise about 15-25 wt%, preferably about 15-20 wt% water including both free water and water of hydration (see col. 5, lines 38-41). The detergent composition is conveniently formulated by sequentially (i) combining an aminocarboxylic acid sequestrant with a sufficient proportion of a potassium alkaline source, (ii) adding a sufficient proportion of a sodium alkaline source, (iii) adding other desired components such as additional water, a casting, a surfactant like nonionic surfactant, and/or a secondary chelating agent, and then (iv) casting the composition (see col. 2, lines 18-30; col. 4, lines 46-63). The detergent composition may be cast directly into a receptacle (see col. 6, lines 25-30). Steindorf, however, fails to specifically disclose (1) a solid binding agent comprising HEDTA and water, and in their recited mole ratio and wherein the binding agent is free of carbonate, (2) the amount of water in the binding agent in the range of about 1 to about 10 wt% as required in claims 20 and 57, and

Art Unit: 1751

(3) the composition being formed as a solid mass in the range of 50 grams or less as required in claims 24 and 61.

With respect to difference (1) it would have been obvious to one of ordinary skill in the art at the time the invention was made to prepare a solid binding agent comprising HEDTA and water which is free of sodium carbonate because sodium carbonate is only optional, and need not be added to the composition as disclosed in col. 4, lines 9-22, and to optimize the proportions of HEDTA and water because it is known to select the portion of the prior art's range which is within the range of applicant's claims because it has been held to be obvious to select a value in a known range by optimization for the best results. As to optimization results, a patent will not be granted based upon the optimization of result effective variables when the optimization is obtained through routine experimentation unless there is a showing of unexpected results which properly rebuts the *prima facie* case of obviousness. See *In re Boesch*, 617 F.2d 272, 276, 205 USPQ 215, 219 (CCPA 1980). See also *In re Woodruff*, 919 F.2d 1575, 1578, 16 USPQ2d 1934, 1936-37 (Fed. Cir. 1990), and *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). In addition, a *prima facie* case of obviousness exists because the claimed ranges "overlap or lie inside ranges disclosed by the prior art", see *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976; *In re Woodruff*, 919 F.2d 1575, 16USPQ2d 1934 (Fed. Cir. 1990). See MPEP 2131.03 and MPEP 2144.05I.

With respect to difference (2) as the word "about" permits some tolerance (see *In re Ayers*, 69 USPQ 109, and *In re Erickson*, 145 USPQ 207), the lower limit of about 15 wt% water of Steindorf may be considered to read on the upper limit of about 10 wt % of water of instant claims 20 and 57.

Art Unit: 1751

With respect to difference (3) it would have been obvious to one of ordinary skill in the art at the time the invention was made to change the size of the solid because a change in size is generally recognized as being within the level of ordinary skill in the art, see *In re Rose*, 105 USPQ 237 (CCPA 1955).

18. Claims 12, 14, 29, 31, 49, 51, 66 and 68 are rejected under 35 U.S.C. 103(a) as being unpatentable over Steindorf as applied to the above claims, and further in view of Rolando et al. (US Patent No. 5,876,514), hereinafter "Rolando".

Steindorf teaches the features as described above. Steindorf, however, fails to disclose the specific nonionic surfactant which comprises linear alcohol, the incorporation of a linear alkylate sulfonate surfactant, and the composition in the form of an extrudate or a pellet.

Rolando teaches a similar composition comprising nonionic surfactants like the condensation of fatty alcohols having 8-20 carbon atoms and alkylene oxide (see col. 3, line 66 to col. 4, line 9), other surfactants which may be used as solidifying agent, for example, linear alkyl benzene sulfonate (see col. 9, line 65 to col. 10, line 5). The composition may take any number of physical forms including compressed, extruded solid or cast solid and the compressed solid includes solids formed by extrusion, tableting, pelletizing and the like (see col. 11, lines 51-64).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have modified the nonionic surfactant of Steindorf with the condensation of fatty alcohols having 8-20 carbon atoms and alkylene oxide nonionic surfactant of Steindorf because Steindorf desires nonionic surfactants which are stable under alkaline solution and Rolando

Art Unit: 1751

provides such nonionic surfactant, to have incorporated a linear alkyl benzene sulfonate into the composition because this will assist in solidifying the composition as taught by Rolando and to have prepared the composition of Steindorf in an extrudate or pellet form because it is known from Rolando that similar compositions can be prepared in cast, extrudate and pellet form.

Conclusion

19. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

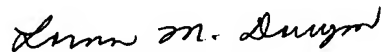
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

20. Any inquiry concerning this communication or earlier communications from the examiner should be directed to [redacted] whose telephone number is (571) 272-1313. The examiner can normally be reached on Mondays-Fridays from 8:00AM to 4:30 PM.

Art Unit: 1751

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Douglas McGinty can be reached on (571) 272-1029. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Lorna M. Douyon
Primary Examiner
Art Unit 1751